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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,741	01/26/2004	Michael A. Weisse	67,097-039/EH-10892	1095
26096	7590	11/14/2005	EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			NGUYEN, NINH H	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,741

Applicant(s)

WEISSE, MICHAEL A.

Examiner

Ninh H. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 8, 9, 12-16 and 18 is/are rejected.
- 7) ☒ Claim(s) 10, 11 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/31/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Applicant's amendment dated 08/31/05 puts claims 1-7 in allowable form. Claims 12-18 were previously indicated as being allowable. Claims 19 and 20 are newly added. However, a routine updated search yields prior art that reads on claims 8, 9, 12-16, and 18. Therefore, the Examiner regrettably withdraws the allowability of claims 12-16 and 18.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Weisse et al. (5,516,593).

Weisse discloses a hollow fan blade (Figs. 1-5) comprising a first substrate having a root edge and an opposite tip spaced radially outward from the root edge (Fig. 4), the substrate further including a leading edge opposite a trailing edge, the leading edge spaced chordwise from the trailing edge; and a second substrate (Fig. 2); and a plurality of curved cavities 44 (Fig. 2) between the first and second substrates, each of the plurality of curved cavities terminating in a first closed end adjacent the tip of the blade; wherein each of the plurality of cavities is formed adjacent at least one elongated continuous curved rib (Fig. 4).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisse et al. in view of Nelson (3,628,226).

Weisse inherently discloses a method for making a hollow fan blade (Figs. 1-5) including the steps of (a) forming a plurality of curved, continuous cavities 44 on a first substrate to form a plurality of curved ribs 36 (Figs. 4, 5) with the cavities on either side of each of the plurality of ribs; (b) abutting the plurality of ribs on the first substrate with a second substrate to form a hollow fan blade (Fig. 2);

forming a plurality of ribs on the second substrate and wherein the step (b) further includes the step of abutting the ribs on the first substrate with the ribs on the second substrate (Fig. 2);

wherein the plurality of ribs do not intersect one another (Fig. 4);

wherein each of the plurality of ribs is not intersected by any other ribs between its opposite ends (Fig. 4);

wherein the plurality of ribs are substantially parallel in a region adjacent a root edge (Fig. 4).

However, Weisse does not disclose forming a plurality of curved, continuous cavities by machining as claimed.

Nelson teaches a method of making a hollow fan blade (Figs. 1-10) comprising the steps of machining a plurality of first continuous cavities on first and second substrates (col. 2, lines 41-46) and abutting the first substrate with the second substrate to form a hollow fan blade (Fig. 2).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made, to apply the method of making a hollow fan blade of Weisse with the step of forming a plurality of curved, continuous cavities by machining as commonly done in the art.

Allowable Subject Matter

3. Claims 1-7, 19, and 20 are allowed.
4. Claims 10, 11, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 1 patent.

Porter et al. (5,063,662) is cited to show a method for making a hollow fan blade.

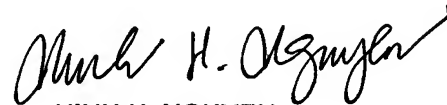
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, please go to <http://pair-direct.uspto.gov> or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).


NINH H. NGUYEN
PRIMARY EXAMINER

Nhn
November 2, 2005